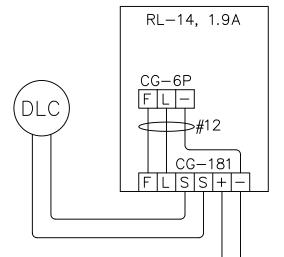
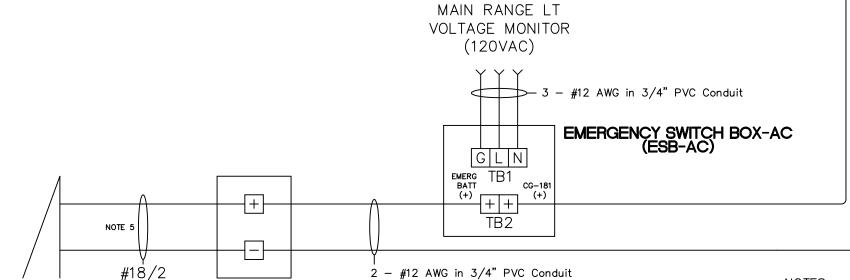
## **EMERGENCY RANGE LT**



	POINT TO POINT WIRE RUNNING LIST			
FROM	WIRE SIZE (AWG)	MAX DISTANCE (FT)	<u>TO</u>	
SOLAR PANEL (+)	18	12	EMERGENCY BATTERY (+)	
SOLAR PANEL (-)	18	12	EMERGENCY BATTERY (-)	
EMERGENCY BATTERY (+)	12		ESB-AC, TB2, EMERG BATT (+)	
ESB-AC, TB2, CG-181 (+)	12	15	RANGE LT, CG-181 (+)	
EMERGENCY BATTERY (-)	12	15	RANGE LT, CG-181 (-)	
RANGE LT, CG-181 (F)	12		RANGE LT, CG-6P (F)	
RANGE LT, CG-181 (L)	12		RANGE LT, CG-6P (L)	
RANGE LT, CG-181 (-)	12		RANGE LT, CG-6P (-)	
PHOTORESISTOR, 1ST LEAD			RANGE LT, CG-181 (S)	
PHOTORESISTOR, 2ND LEAD			RANGE LT, CG-181 (S)	

BILL OF MATERIALS								
<u>ITEM</u>	<u>TYPE</u>	SOURCE OF SUPPLY	QUANTITY					
SOLAR PANEL (10W)	G-SEC QPL 401A	ELC	NOTE 3					
EMERGENCY SWITCH BOX-AC	ESB-AC	G-SEC	1					
PHOTORESISTOR	TYPE L	ELC	1					
RANGE LT, RL-14	CARLISLE & FINCH	ELC	NOTE 1					
12VDC FLASHER	CG-181	ELC	1					
12VDC LAMPCHANGER	CG-6P	ELC	1					
LAMPS	12VDC, 1.9A	ELC	6					
EMERG BATTERY, LEAD ACID 100AH	S2000	DELCO	NOTE 3					



**EMERGENCY BATTERY** 

(100AH)

## NOTES:

- RANGE LANTERN, LAMPS, RHYTHM, AND BEAM WIDTH DETERMINED BY INTENSITIES RECOMMENDED BY THE RANGE DESIGN PROGRAM.
   NORMALLY-CLOSED RELAY IN ESB IS HELD OPEN WHEN MAIN RANGE LIGHT OPERATING NORMALLY; WHEN MAIN SIGNAL VOLTAGE FALLS BELOW 36VAC, RELAY DEENERGISES, TURNING ON THE EMERGENCY RANGE LIGHT.

- RELAY DEENERGIZES, TURNING ON THE EMERGENCY RANGE LIGHT.

  3. BATTERY AND PANEL SIZED FOR CONTINUOUS TRICKLE—CHARGE AND UP TO FOUR DAYS EMERGENCY LIGHT OPERATION IF MAIN POWER FAILS.

  4. WIRE SIZED FOR MAX ANTICIPATED LOAD. WIRES MAY BE RESIZED ONLY IF LOAD & CHARGING CIRCUIT VOLTAGE DROPS DO NOT EXCEED 0.1V & 0.6V RESPECTIVELY.

  5. STANDARD SOLAR PANEL COMES WITH 12FT LEAD #18AWG PIGTAIL. IF NO LTB AND PANEL IS CLOSE TO BATTERY, CONNECT PIGTAIL DIRECTLY TO BATTERY.

  6. ALL WIRE RUNS SHALL BE ENCLOSED IN APPROPRIATELY SIZED RIGID OR LIQUID—TIGHT FLEX CONDUIT AS INDICATED TO FORM A WEATHERTIGHT SYSTEM AND PROTECT ELECTRICAL COMPONENTS FROM THE ELEMENTS.

A	12/03	JTG	ADDED CONDUIT AND NOTE 6.						KMD
REV.	DATE	APPR.	DESCRIPTION					BY	
DESIGNED: STN DRAWN: STN TRACED:			U.S. COAST GUARD				HEA	DQUAR	TERS
			CIVIL ENGINEERING						
CHECKED: KA/JTG REVIEWED BY:			STANDARD AID TO NAVIGATION						
H.R. CLEVELAND G-SEC-2A			OPTIONAL EMERGENCY RANGE LIGHT						
REMEW	ED BY: E. JAEG	ER	(FOR 12	:OVA	C MA	IN LK	GHT)		
G-SEC-2 REVIEWED BY:			APPROVED: CAPT J.	A. R	AUCH			DATE 5/19	/97
LINI	E88 C	THED	CHIEF, OFFICE O	F CIVIL EI	NGINEERING	DRAWING	NIMBER		
ALL DIMENSIONS TOLERANCES: DI		SIONS	ARE IN INCHES.	130505				REV.	
		A	NG.	SCALE:	NONE		SHEET	1 OF	1

**SOLAR** 

**PANEL** (10W)